

## MEMORANDUM

**TO:** Catawba County Board of Commissioners  
**FROM:** J. Thomas Lundy, County Manager  
**DATE:** February 2, 2001  
**SUBJECT:** Strategic Plan for Emergency Services Staff Recommendations

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### REVIEW

For Fiscal Year 1999/2000, the Board of Commissioners decided it was time to evaluate the needs of the County in regard to fire, rescue, emergency medical services, and emergency communications. In August 1999, FreemanWhite, Inc. was retained to develop a long-range, Countywide strategic plan which would insure the best use of taxpayer money for fire, rescue, and emergency medical services. The completed plan was presented to the Board of Commissioners on September 12, 2000. The plan was also presented at two additional sessions on September 13, 2000 to volunteer and paid emergency personnel. In addition, the plan was also posted on the County's web site.

In response to the presentation of the plan, the Board of Commissioners adopted the following goal during its fall planning retreat in October 2000:

*After discussion with stakeholders – Rescue Squad and Fire Department Leadership, EMS Personnel, and Communication Center Telecommunicators – implement immediate, short-term, and long-term recommendations which:*

- A. Provides a Countywide response time of no more than four minutes for first response and eight minutes for EMS.*
- B. Secures the best long-term use of facilities, equipment, and personnel, both paid and volunteer.*
- C. Establishes an advisory committee comprised of stakeholders.*

During the retreat, staff was directed to develop and present to the Board of Commissioners by February a plan for implementation. During the months of October, November, and December, the County Manager and members of his staff met with representatives of the rescue squads and fire departments, EMS personnel, and Communication Center telecommunicators on nine separate occasions. These stakeholders provided insight into the challenges being faced by the agencies providing emergency services to the citizens of Catawba County. The volunteer and paid personnel participating in these meetings displayed professionalism, a high level of competence, and a high level of concern for patient care and service to the public. These meetings reinforced how fortunate Catawba County is to have such talented people serving its citizens.

Once all of the meetings with the various stakeholders were held, staff began the process of sorting through a large list of comments and concerns that were noted in the plan and by the stakeholders. Staff categorized the individual topics as immediate, short-term, and long-term

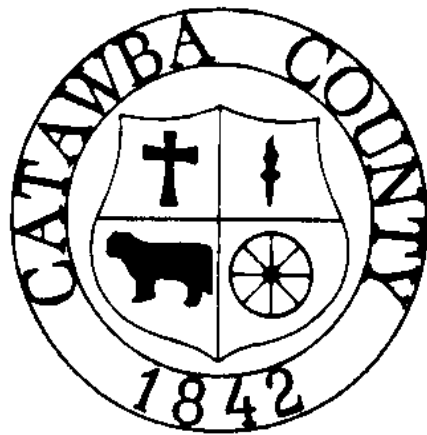
into the functional areas of fire, rescue, EMS, Communication Center, and other. Some issues fit into two or more areas.

Emergency services are provided to citizens of the County in a dynamic matrix of County, municipal, and volunteer organizations. A spirit of cooperation has been and will continue to be important. The Board of Commissioners' and citizens' willingness to provide necessary long-term financing will determine the success of new initiatives.

### **Recommendation**

The Board of Commissioners authorize staff to implement immediate needs/issues identified in the enclosed recommendations. \$300,000 is set aside in the Fiscal Year 2000/2001 budget for the implementation of a portion of the Strategic Plan for Emergency Services. These funds will cover costs associated with issues/needs identified in the recommendations as immediate. Short-term issues/needs will begin to be addressed in the Fiscal Year 2001/2002 budget.

# **STRATEGIC PLAN FOR EMERGENCY SERVICES STAFF RECOMMENDATIONS**



**Catawba County, North Carolina  
February 5, 2001**

One of the most important missions of any local government is to safeguard life and property. Catawba County, its volunteers, its staff, and its municipalities have a rich history of providing high levels of service in the area of emergency services to the citizens of the County. As the County has grown, the methods in which these various services are provided has changed dramatically. Currently, emergency services are provided to the citizens of Catawba County through a web of County, volunteer, and municipal agencies.

Realizing that the County has undergone tremendous growth during the past 25 years, the Board of Commissioners decided it was time to assess the needs of the County with regard to fire, rescue, emergency medical services, and emergency communications. Therefore, for Fiscal Year 1999/2000 the Board of Commissioners adopted the following goal:

*"In cooperation with the Rescue Association and the County's fire districts and departments, develop a long-range, Countywide strategic plan which ensures the best use of taxpayer money for fire, rescue and emergency medical services."*

In August 1999, the services of FreemanWhite, Inc. were retained to develop this plan. The study for the plan was conducted as a joint effort between the County and a Study Steering Committee, consisting of representatives from fire, rescue, Emergency Medical Services (EMS), communications, and emergency management. The objectives of the plan were:

1. *To assess the challenges and needs facing the County's fire, rescue, and EMS services today and for the next ten years.*
2. *Identify the resources necessary to meet those needs.*
3. *Recommend how best to provide these services.*

The completed plan was presented to the Board of Commissioners on September 12<sup>th</sup>, 2000. The plan was also presented at two additional sessions on September 13<sup>th</sup> to volunteer and paid emergency personnel. In addition, the plan was also posted on the County's web site. The plan includes a detailed analysis of the current state of the County's emergency services, challenges facing emergency services, and, most importantly, a proposed strategic plan for emergency services for the next ten years. In response to the presentation of the plan, the Board of Commissioners adopted the following goal at their fall planning retreat in October 2000:

*After discussion with stakeholders – Rescue Squad and Fire Department Leadership, EMS Personnel, and Communication Center Telecommunicators – implement immediate, short-term, and long-term recommendations which:*

- A. *Provides a Countywide response time of no more than four minutes for first response and eight minutes for EMS.*
- B. *Secures the best long-term use of facilities, equipment, and personnel, both paid and volunteer.*
- C. *Establishes an advisory committee comprised of stakeholders.*

Staff was directed to develop and present to the Board of Commissioners a plan for consideration for implementation by the end of January 2001. During the months of October, November, and December, the County Manager and members of his staff met with representatives of the rescue squads and fire departments, EMS personnel, and Communication Center telecommunicators on nine separate occasions. Comments, feedback, and suggestions were gathered from these stakeholders concerning their reaction to the proposed Strategic Plan for Emergency Services. More importantly, the stakeholders provided insight into the challenges being faced by the agencies providing emergency services to the citizens of the County. Stakeholders were encouraged to freely voice their opinions and a high level of participation was noted during these discussions. The volunteer and paid personnel participating in these meetings displayed professionalism, a high level of competence, and a high level of concern about patient care and service to the public. These meetings reinforced how fortunate Catawba County is to have paid and volunteer staff serving its citizens.

Once all of the meetings with the various stakeholders were held, staff began the process of sorting through a large list of comments and concerns that were noted in the plan and by the stakeholders. Staff categorized the individual topics as immediate, short-term, and long-term into the functional areas of fire, rescue, EMS, Communication Center, and other. Some issues fit into two or more areas.

Emergency services are provided to citizens of the County in a dynamic matrix of County, municipal, and volunteer organizations. A spirit of cooperation has been and will continue to be important. The Board of Commissioners' and citizens' willingness to provide necessary long-term financing will determine the success of new initiatives.

## **IMMEDIATE ISSUES/NEEDS**

It became obvious during the review of the Strategic Plan for Emergency Services and while listening to comments made during meetings with stakeholders that there are some major issues that should be addressed immediately. If approved by the Board of Commissioners, action will be taken immediately to address these issues before July 1, 2001.

### **Fire**

#### ***Hickory Fire Department as First Response***

On January 1, Hickory Fire Department began assisting the Hickory Rescue Squad in providing first responder and basic rescue services within Hickory's corporate limits. The City of Hickory expressed an interest in providing these services over two years ago. Through numerous meetings, rounds of negotiations, and overall cooperation by both parties, an informal agreement was reached that protects the interest of both agencies and, most importantly, the citizens of the County.

This service agreement has had a positive impact on first response time both within the City of Hickory and for the entire Hickory Rescue District. First response time within the City is averaging four minutes and response time within the unincorporated area of the district is well on its way to meeting the four-minute target. This will be a major achievement given that Hickory Rescue's call volume is two to three times greater than any other rescue area in the County,

and land area covered by the squad makes up approximately 40% of the County. Hickory Rescue and Hickory Fire Department should be commended on reaching an agreement that better protects the lives of citizens living within their service areas.

**Recommendation: Support Hickory Rescue Squad in providing first response and basic rescue services in cooperation with Hickory Fire Department. Furthermore, use their agreement as a model for other municipalities that express an interest in providing first response and basic rescue services. Purpose: To provide a response time of no more than four minutes for first response.**

#### ***Quarterly Financial Statements for Volunteer Fire Departments***

Representatives from the County's volunteer fire departments noted it is useful in expenditure planning and revenue projection to have up to date financial information.

**Recommendation: In response to the request from the County's volunteer fire departments, provide quarterly financial statements to all departments through the County's Finance Department. Purpose: To secure the best long-term use of facilities, equipment, and personnel.**

#### ***False Alarm Ordinance***

As noted in the plan, 33.2% of all fire calls received during the past five years were false alarms. Of the false alarms, 52% were due to mechanical malfunction of alarm systems. The County has averaged 960 false alarm calls per year during the past five years. Responses to false alarms needlessly endanger life and property, tie up valuable fire and emergency communication resources, and cost taxpayers' dollars. The plan recommended that the Board of Commissioners adopt a False Alarm Ordinance that would penalize individuals and businesses that continue to create problems with false alarms. During all of the meetings with stakeholders only positive feedback was received for the adoption of a False Alarm Ordinance, especially among the fire departments and Communication Center personnel.

While discussing the need for a False Alarm Ordinance with the stakeholders, another issue was brought to staff's attention. A large and growing number of businesses and households in the County have purchased and are using security alarms. Telecommunicators noted that when some of these alarms are activated, alarm company representatives phone the Communication Center to report the alarm. These representatives normally have no information concerning the reason for the alarm and sometimes do not even know the physical address where the alarm is sounding, wasting time and tying up Communication Center staff energy and County resources. To further complicate matters, alarm companies usually do not have the names and phone numbers for key holders that can allow access into the structures. Stakeholders noted that it would solve problems in terms of responding to false alarms and tying-up emergency communication line if the County could ensure proper performance standards for alarm companies conducting business within the County. Staff is

currently drafting a False Alarm Ordinance. Once the draft is complete, the proposed ordinance will be ready for Board review and action.

**Recommendation: In order to reduce the number of false alarms, adopt a False Alarm Ordinance that encourages responsibility by alarm companies, individuals, and business that repeatedly cause problems with false alarms and establishes performance standards for alarms. Purpose: To secure the best long-term use of facilities, equipment, and personnel, both paid and volunteer.**

### ***House Number Amendment***

Representatives from the County's fire departments noted that it is sometimes difficult to respond to the correct location because house numbers are not present or not visible. Representatives noted that it would decrease response time and alleviate some confusion not only for fire personnel, but also for EMS and rescue, if house numbers visible from roadways were required for every structure in the County.

Planning Department staff is currently drafting an amendment that would require house numbers on every home, business, and major structure within the County. Once the draft is finalized in mid-January, the Planning Board will review it and a recommendation will be made to the Board of Commissioners.

**Recommendation: Adopt an amendment to the County Code that requires house numbers to be visible from roadways for every home, business, and major structure within the County. The amendment will include a provision that requires numbers on all structures that are considered new construction. Existing structures would be allowed a reasonable period of time to comply. Purpose: To assist in providing a Countywide response time of no more than four minutes for first response and eight minutes for EMS.**

### ***County Fire Inspector Vehicles***

During staff's meeting with representatives from the County's fire departments, several representatives noted that only the "on-call" Fire Inspector is allowed to take home a County vehicle after hours. It was noted that occasionally both of the County's inspectors are required to respond to calls at the same time with necessary equipment that is stored on the County vehicles. The response time for the inspector that is not on-call is greatly increased by having to travel to the Government Center, pick-up a County vehicle, and then respond to the call.

**Recommendation: In order to enhance response times when multiple fire inspectors are called out after working hours, allow an additional "on-call" fire inspector to take home a County vehicle after normal working hours. Purpose: To enhance response times for fire inspectors.**

## **Rescue**

### ***Shared EMS/Rescue Ambulances***

Currently, County EMS has a fleet of ambulances that contains many high-mileage units. On the other hand, several of the rescue squads operate

ambulances that have relatively lower-mileage compared to the EMS vehicles. Rescue and EMS have a record of cooperation and their success is interdependent. In order to get the most efficient and effective return for the taxpayers' dollars, it is recommended that an agreement between the County and rescue squads that would allow the County EMS to use some rescue squad ambulances paid for by County taxpayers be developed and executed. This would be beneficial to all parties concerned. Such an agreement will increase the number of reliable emergency vehicles on the road, and in turn will increase service levels for the citizens of the County. Such an agreement will also have a positive impact on response time for both agencies by placing more full-service units on the road and ensuring quicker response.

The Rescue Squad Association has agreed in principle to such an agreement. Specifically, Hickory Rescue and Maiden Rescue have agreed to allow EMS to use spare ambulance. A formal contract that provides for specifics in terms of back-up units, repair, maintenance, length of use, and other terms has been prepared (attached).

**Recommendation: Negotiate an agreement between the County and rescue squads, specifically Hickory and Maiden squads, that will allow EMS to use some rescue squad ambulances paid for by County tax dollars for the better provision of emergency service to the citizens of the County until the County purchases new, replacement units. Purpose: To assist in providing a Countywide response time of no more than four minutes for first response and eight minutes for EMS and to secure the best long-term use of facilities, equipment, and personnel, both paid and volunteer.**

## **Communication Center**

### ***Fire Map***

During discussions with Communication Center personnel, it was noted that the center's fire map had been removed from the wall for repairs and had not been put back in place. The fire map is used as an aid to reference district boundaries and plot where fires are taking place in the County.

**Action taken: Repairs have been made to the fire map and it has been placed back in its proper location.**

### ***Dedicated Dispatch***

Another concern of emergency communications voiced by all stakeholders is dedicated dispatch. Dedicated dispatch assigns at least one telecommunicator for each functional area of emergency services. For example, one telecommunicator for EMS, one telecommunicator for fire and rescue, and one telecommunicator for law enforcement. Dedicated dispatch will allow field units to remain in contact with the same telecommunicator during an emergency situation, thus eliminating confusion for both communication staff and emergency personnel in the field.

**Recommendation: Through cooperation with the Sheriff and Communication Center personnel, begin the process of implementing dedicated dispatch. Purpose: To secure the best long-term use of personnel.**



### ***Additional Personnel***

Catawba County has grown dramatically during the past five years, and call volume in the Communication Center has increased 46%. Over the same period of time, there has been no increase in the number of full-time personnel. There is an immediate need for additional personnel in the Communication Center.

Any emergency service occupation can be stressful. This is especially true in emergency communications. The stress levels are compounded in the Communication Center due to the staffing levels – telecommunicators work eight-hour shift often with no breaks, including lunch. This problem must be addressed.

**Recommendation:** By March 2001, add four additional non-sworn, professional, career minded telecommunicators in order to handle increased call volumes, reduce stress levels, and implement a dedicated dispatch system. This will begin the process of ensuring staffing levels of five telecommunicators for both first and second shifts and three telecommunicators for third shift. In addition, one telecommunicator will work a floating shift from 5pm to 2am, Monday through Friday. **Purpose:** To secure the best long-term use of personnel.

### ***Records Division Staffing***

During staff discussions with Communication Personnel, it was indicated that the Communication Center spends considerable time checking criminal records for deputies on patrol, providing administrative support to other employees of the Sheriff's Department, and answering calls for other agencies after normal business hours. It was noted that if these responsibilities were assigned to another area, telecommunicators could spend more time providing direct assistance to immediate emergency services operations

**Recommendation:** Assign an additional person to staff the Records Division to begin the process of instituting coverage 24 hours per day, 7 days a week in order to relieve some of the work load in the Communication Center. **Purpose:** To secure the best long-term use of personnel.

### ***Security of Communication Center***

It was noted during the meetings with the telecommunicators that the security code for access to the Communication Center has not been changed in a number of years. Furthermore, numerous law enforcement personnel know the code. Therefore, access to the Communication Center is open for many individuals that do not need access. To compound the situation, mailboxes for road officers are located in the Communication Center. Road officers are constantly entering the area to check their boxes. This inadvertently distracts communication staff and can unnecessarily create a more hectic environment.

**Recommendation:** In order to improve security for the Communication Center, change the key code for access on a regular basis and move mail boxes to another area in the administrative offices of the Sheriff's Department. **Purpose:** To increase security and avoid unnecessary traffic and distractions.

## **Emergency Medical Services (EMS)**

### ***Additional Restroom for Hickory Base***

EMS personnel noted there is need for an additional restroom at the Hickory EMS base. Two full crews are located at the base. This problem can be compounded if crews are in a rush to leave the base in order to answer an emergency call in the middle of the night.

**Action taken: The City of Hickory is requiring that an engineer's drawing showing locations of water and sewer lines inside and around the Hickory base be submitted before a building permit for an additional restroom will be issued. An engineer is working on a drawing and construction of a new restroom will begin in February.**

### ***Intranet Access***

All County employees have discovered that the County's Intranet is a valuable tool and resource. Currently, the County's EMS bases do not have access to the Intranet. EMS personnel noted that these resources would be useful for gathering internal County information.

**Action taken: A contract has been signed with an internet service provider that will provide high-speed, on-line access at all EMS bases. Information Technology staff is currently in the process of installing necessary software at the EMS bases. Intranet access will be available at the bases within the next few months.**

### ***Propst and Sherrills Ford EMS Bases to Full-Service***

As noted in the plan and through discussion with EMS personnel, calls for County ambulance service have increased 31% during the past five years. Average response time has exceeded eight minutes and is coming close to nine for Propst and Newton bases. Catawba base's average has exceeded ten minutes and is approaching eleven. The other bases all have a response time over seven minutes and are approaching eight. All groups of stakeholders – fire, rescue, EMS, and the Communication Center – noted that in order for response times to decrease additional crews are needed by EMS. Currently two bases, Sherrills Ford and Propst, are operating as quick response bases with no transport capability, but are designed and ready to house full-service crews. Bringing these bases to full-service would address call volume and response time issues for the entire County. For example, quick response vehicles (QRVs) do not have the ability to transport patients. If a QRV is dispatched from the Sherrills Ford Base to the Highway 150 area, a transport ambulance must also respond to the call, usually from either the Catawba or Newton Base. If, at the same time, a call is received in the Newton or Catawba area, there are no units in the area to quickly respond and ambulance is pulled from another location. This has a domino effect in terms of ambulance availability and, most importantly, response time. By bringing more bases to full-service, more EMS personnel will be on the road, and therefore a higher level service will be provided to the citizens Countywide.

**Recommendation:** In order to improve EMS response times, in March 2001 bring Sherrills Ford and Propst EMS Bases to full-service through the addition of eight full-time paramedics. **Purpose:** To assist in providing a Countywide response time of no more than eight minutes for EMS.

#### ***EMS Shift Supervisors***

Another issue that has an impact on EMS response time is the lack of coordination between ambulance crews on specific shifts and the time spent by supervisors performing patient care responsibilities instead of administrative duties. Currently, a crew chief also serves as a shift supervisor. This person is not only responsible for the overall administration of the shift including the tedious task of calling and scheduling part-time paramedics, but also responds to calls and provides care to patients. It would be extremely beneficial to have a supervisor for each shift that is not assigned to an ambulance. These supervisors would be responsible for the coordination and administration of shift personnel and resources. The supervisors could also act as quick response units for emergency situations and fill a critical void. This would reduce the overwhelming workload currently placed on crew chiefs and provide more efficient and effective operations for EMS. Shift supervisors could be hired from the current pool of crew chiefs and be equipped with quick response vehicles currently based at Propst and Sherrills Ford.

**Recommendation:** In order to provide more effective and efficient EMS operations and service, in March 2001 provide an “off-ambulance” supervisor for each shift. **Purpose:** To secure the best long-term use of personnel.

#### ***Customer Feedback***

As with any service profession, it is important the EMS personnel receive feedback from their customers, the patients they treat and people they come in contact with. It was noted during the discussions with EMS personnel that they would like feedback and the chance to review patient surveys and evaluations of their work. Furthermore, it was noted that thank you cards and other letters of appreciation sometimes fail to reach them.

**Recommendation:** In order to provide EMS personnel with customer feedback, ensure that patient reviews and surveys are periodically but regularly provided to individual paramedics. Furthermore, ensure that all correspondence from patients is delivered to the intended recipient in a timely manner.

#### ***Supply and Restocking of Equipment***

EMS personnel noted that there are problems relating to the supply and restocking of equipment. It was noted that some supplies completely run out before they are restocked. EMS and the rescue squads have developed an established supply and equipment restocking policy. However, some policy changes in terms of financial management and the timing of restocking may be needed.

Another issue that will impact this topic relates to the manner in which EMS and rescue squad supplies are restocked by local hospitals. EMS, the rescue

squads, and local hospitals have been exchanging supplies/drugs for a number of years. EMS purchased the initial inventories and has since received replacements from the hospitals. Normally, EMS restocks rescue squad units. When rescue squads transport patients, the hospitals restock the rescue ambulances. If a certain supply/drug is used, the hospital is notified, the hospital and EMS bill the patient or rescue receives new stock from the emergency room. A ruling by the Office of the Inspector General has modified the manner in which supplies/drugs can be purchased and/or exchanged. EMS, the rescue squads and local hospitals are dedicated to working together in order to provide supplies/drugs to EMS and rescue patients at the lowest possible price. It is possible that an agreement will need to be reached which allows EMS and the rescue squads to purchase supplies/drugs from hospitals at cost and then directly bill patients. In any case, cooperation will continue between EMS, the rescue squads, and the hospitals.

**Recommendation: Review the established supply and equipment restocking policy for EMS to ensure all required supplies and equipment are purchased and restocked in accordance with the policy. Reach an agreement with local hospitals that allows restocking of supplies in a fiscally responsible manner. Purpose: To secure the best long-term use of equipment.**

#### ***Future EMS Base Locations***

As the County continues to grow, EMS will continue to be faced with the challenge of providing increased levels of service. In order to provide increased levels of service, new EMS bases will be required. As locations of future bases are evaluated, several factors should be considered including strategic locations that allow for response times of no more than eight minutes, adequate coverage of all areas of the County, and the possibility of co-locating with rescue and/or fire bases.

**Recommendation: Evaluate the location of current EMS bases to identify strategic locations for future bases that allow for response times of no more than eight minutes and adequate coverage of the entire County. Consider co-location of EMS bases with fire and rescue bases. By July 1, 2001, develop a plan that establishes future base locations and identifies a time frame and cost plan for new bases. Purpose: To Provide a Countywide response time of no more than eight minutes for EMS.**

### **Other Areas**

#### ***Development of an Emergency Services Advisory Committee***

As recommended in the plan and discussed by all of the stakeholders, the development of an Emergency Services Advisory Committee to focus on long-range issues and make recommendations to staff is an important aspect of the County's long-term goals for emergency services. It was noted that the committee should be made up of no more than eight members and should include representation from all aspects of emergency services. Such a committee can focus on issues such as redistricting of fire and rescue boundaries, the development of service districts for urban areas of the County, the need for paid

employees for fire and rescue, and many other issues. A section of this report is devoted to specific issues to be explored by an advisory committee.

**Recommendation: Direct staff to select and begin working with an Emergency Services Advisory Committee made up of two members each from fire, rescue, EMS, and the Communication Center. This committee will provide staff with input concerning long-term issues that impact the County's emergency services. Purpose: To secure the best long-term use of facilities, equipment, and personnel, both paid and volunteer and to establish an advisory committee comprised of stakeholders.**

### ***Volunteer Recruitment Efforts***

The proposed plan and volunteer agencies noted that it is more difficult for volunteer fire and rescue to recruit new members into their ranks. The pace of life has become increasingly intense for all members of today's society. People have less time to dedicate to volunteer organizations like volunteer fire departments and rescue squads. Understanding that volunteers are the backbone of emergency services in Catawba County, increased efforts should be undertaken to recruit new volunteers. Stakeholders also indicated that many members of volunteer organizations work outside of their districts, making it difficult to respond to calls during business hours. This increases response times for volunteer fire and rescue during daytime hours. Special emphasis should be placed on the recruitment of volunteers that can respond to calls between 8am and 5pm. Furthermore, it was noted that in an effort to increase the recruitment of public safety volunteers, other states have enacted special policies. Some states offer tax incentives for volunteers. In other states, volunteers are provided a level of employment protection that allows them to respond to emergencies during working hours without the fear of losing their jobs or facing disciplinary action for being absent. It is important that the County's volunteers understand that their dedication and hours of hard work is greatly appreciated.

**Recommendation: Through presentations in the County's high schools, community college, and job fairs, increase efforts to recruit interested volunteers for fire departments and rescue squads, especially those that can respond to calls during business hours. In order to increase the number of volunteers, explore options in terms of providing special benefits for volunteers including tax incentives and employment protection. Purpose: To ensure long-term volunteers which can provide a Countywide response time of no more than four minutes for first response.**

### ***Standardized Equipment/Single Purchase Point***

During discussions with the various stakeholders, it became obvious that it is important for rescue and EMS to have standardized equipment. Members for either agency should be trained on and be familiar with equipment used by both agencies. This will become an even more important issue as the operations of rescue and EMS become more closely related. This issue can also provide an opportunity for possible cost savings through bulk purchases. The rescue squads and EMS use many types of similar equipment in everything from ambulances and defibrillators to radio batteries and backboards and currently attempt to

standardize purchases. For example, representatives from both EMS and rescue noted that it would be beneficial for both agencies to use standard ambulances. Specifications that are agreeable to both agencies can be developed that would include performance standards, as well as the internal placement of equipment in the vehicles.

**Recommendation:** Through cooperation between EMS and rescue, place more emphasis on a standardized equipment list and single purchase point for both agencies. Develop a plan that allows for the purchase of standard equipment, including ambulances, for both EMS and rescue. Purpose: To secure the best long-term use of equipment, both paid and volunteer.

## **SHORT-TERM ISSUES/NEEDS**

Short-term issue/needs require a level of negotiation and cooperation between the various agencies providing emergency services to the County or require adequate time for County staff to develop specific solutions to issues and problems. Short-term issues/needs are recommended to be addressed and funded during the 2001/2002 Fiscal Year.

### **Fire**

#### ***Municipal Fire Departments as First Response***

As indicated in the plan, the provision of first response and basic rescue services by municipal fire departments in more urbanized areas can have a positive impact on response times, not only in these areas but also for the entire County. The Hickory Rescue Squad and Hickory Fire Department reached the first agreement in the County for jointly providing such services and have successfully implemented the agreement. The agreement and implementation process used by these two agencies should be used as model.

Other municipalities may express an interest in providing first response and basic rescue services within their corporate limits. If municipalities make the decision to begin providing these services, clear agreements should be reached that protect the best interest of the County. In order to reach such agreements, current service providers should spearhead negotiations. For example, if the City of Claremont expresses an interest in providing first response and basic rescue services, the Claremont Rescue Squad and the City can agree on terms of standard service levels by using Hickory's process as a model. The groundwork for such standards has been established through a memorandum of understanding that is required by the County's Medical Director to be agreed upon by any interested municipality and the County. However, it should be noted that service issues in terms of response times and length of service provision are not addressed in this memorandum. Current service providers, the rescue squads, can negotiate these specific terms.

**Recommendation:** Evaluate interest and ability of the County's municipalities to provide first response and basic rescue services. If a municipality expresses an interest to provide these services, use the established agreement between Hickory Fire and Hickory Rescue to negotiate an agreement through the current service provider (specific rescue squad) that:

**provides for a response time of no more than four minutes, provides for a term of service provision with an adequate notice of service termination, provides for mutual aid inside and outside of corporate limits, and addresses any other special issues that are unique to the specific service area. Purpose: To provide a first response time of no more than four minutes.**

## **Rescue**

### ***Specialized Rescue Response Teams***

Numerous rescue personnel have received training and certification in various areas of specialized rescue operations, including trench rescue, high angle/rope rescue, and confined space rescue. State legislation has been proposed that will create a regional Urban Search and Rescue Strike Force for the western piedmont area. The proposal establishes a regional team made-up of rescue personnel from various jurisdictions within the region. Catawba County's representation in this strike force is the Claremont Rescue Squad.

Rescue and EMS personnel noted an increased need for specialized rescue teams as the County continues to grow. Possible types of specialized rescue teams include swift water rescue, trench rescue, high angle/rope rescue, collapsed building rescue, and confined space rescue. It was also noted that everyone does not need to be required to be trained in every type of special rescue operation. For example, a swift water rescue team could be based at the Sherrills Ford Rescue Squad, but could be staffed by various members of each rescue squad and EMS personnel, if required. Such an approach will ensure that all bases are covered, while providing for the most efficient use of County resources.

**Recommendation: Work with rescue squads to establish specialized rescue response teams within the County and, if feasible, develop a plan for placing such teams into action. Purpose: To secure the best long-term use of equipment and personnel.**

## **Communication Center**

### ***Professional Career Track/Organizational Structure***

An effective emergency communication system is the heart or the brain, if you will, of a successful emergency services system. As stated in the proposed plan and discussed during meetings with stakeholders, there is a need to establish a professional career track for the County's telecommunicators. The Communication Center is a high-energy environment that requires personnel who have the ability to function in a stressful environment. Telecommunicators are responsible for answering emergency (911) calls, dispatching fire, rescue, EMS, and law enforcement personnel, and staying in constant contact with these units operating in the field. Telecommunicators must be tactful yet assertive, while maintaining the ability to manage numerous tasks at the same time. Telecommunicators are the link between citizens in emergency situations and the people who are on the way to provide assistance. Catawba County is lucky to have dedicated personnel willing and more than able to serve in such a trying environment.

Stakeholders noted that the Communication Center is sometimes a training ground for individuals who have the important career goal of working as law enforcement officers on road patrol. This has led to high turnover and can enforce the impression that communication positions are not as valued within the organization.

The Sheriff has and continues to do an excellent job overseeing the operations and personnel in the Communication Center, while at the same time managing the operations of the other divisions within his department. He has vast knowledge and expertise in the area of emergency communications. However, this may not always be the case due to the fact that the Office of Sheriff is an elected position in North Carolina. Another Sheriff may not have an understanding of the operations and requirements of emergency communications. Also, since in its current organizational structure telecommunicators are appointed by and serve at the pleasure of the Sheriff, there is no guaranteed job tenure. A new Sheriff could dismiss trained telecommunicators after he or she assumes office. Job security and stability is a must to ensure a professionally oriented career track for telecommunicators.

**Recommendation: Establish a professional telecommunications career track through changes in the County's personnel policies and discontinuing the practice of transferring telecommunicators to road patrol positions. Cooperate with the Sheriff on changes to eventually move the Communication Center to a department supervised by the County Manager. Purpose: To secure the best long-term use of personnel and develop a professional career track for the County's telecommunicators.**

#### ***Additional Personnel***

Catawba County has grown dramatically during the past five years, and call volume in the Communication Center has increased 46%. Over the same period of time, there has been no increase in the number of full-time personnel. There is an immediate need for additional personnel in the Communication Center.

Any emergency service occupation can be stressful. This is especially true in emergency communications. The stress levels are compounded in the Communication Center due to the staffing levels – telecommunicators work eight-hour shift often with no breaks, including lunch. This problem must be addressed.

**Recommendation: In July 2001, add three additional non-sworn, career minded telecommunicators. This will ensure staffing levels of five telecommunicators for both first and second shifts and three telecommunicators for third shift. In addition, one telecommunicator will work a floating shift from 5pm to 2am, Monday through Friday. Purpose: To secure the best long-term use of personnel.**

#### ***Records Division Staffing***

During staff discussions with Communication Personnel, it was indicated that the Communication Center spends considerable time checking criminal records for deputies on patrol, providing administrative support to other employees of the Sheriff's Department, and answering calls for other agencies



after normal business hours. It was noted that if these responsibilities were assigned to another area, telecommunicators could spend more time providing direct assistance to immediate emergency services operations

**Recommendation: Evaluate the need of an additional person to staff the Records Division to continue the process toward providing coverage 24 hours per day, 7 days a week in order to relieve some of the work load in the Communication Center. Purpose: To secure the best long-term use of personnel.**

## EMS

### ***Ambulance Replacement Schedule***

Currently, the majority of ambulances operated by EMS could be considered high-mileage units (150,000 or more) and are constantly on the road. There is a need to replace ambulances in a standard way, as is done with the Sheriff's patrol vehicles.

**Recommendation: Adopt an ambulance replacement schedule for EMS that allows for new, fully equipped ambulances to be purchased each year beginning with three in Fiscal Year 2001/2002. The new ambulances will be rotated into the EMS fleet. Purpose: To secure the best long-term use of equipment.**

### ***Restructure Shift Schedules***

The current shift rotation for EMS crews involves working one set of shifts during the day and the next set of shifts during night. Some paramedics indicated that the shift schedule constantly kept their internal clock in a state of adjustment. As soon as they get accustomed to working days the shift schedule changes and they move to nights. Many paramedics indicated it would reduce mental and physical stress levels, make it easier to schedule family events, and be an overall better working situation if they could work either all days or all nights.

Paramedics also indicated that currently they do not rotate often enough between the County's various bases. It was noted that it gets rather routine to work from the same base day in and day out. Furthermore, it is important for paramedics to be familiar with all areas of the County, which can be achieved through more base rotation. EMS management indicated there is a need to access the current shift scheduling through evaluating the impact on service levels, employee morale, and employee preferences.

**Recommendation: Evaluate the need to restructure EMS shift schedules in order to establish the best shift schedule that maintains or improves service levels and employee morale. Purpose: To secure the best long-term use of personnel.**

## **LONG-TERM ISSUES/EMERGENCY SERVICES ADVISORY COMMITTEE**

As identified in the description of immediate needs, it is recommended that an emergency services advisory committee be established. This committee will work with and

provide input to staff in terms of major long-range issues facing the County's emergency services. Below is a list of issues which the committee can be asked for input:

- The realignment of Fire, Rescue, and EMS Service District Boundaries.
- Evaluate the need for paid employees for volunteer fire and rescue.
- The development of service districts for the provision of emergency services to unincorporated, urban areas of the County.
- The feasibility of merging some or all of the County's fire departments and rescue squads.
- Evaluate an 800mhz or other communication system for all of the County's emergency service providers.